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Pacific
Southwest
Region

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Decision Notice and Finding of No Significant Impact for California Spotted Owl Sierran Province Interim Guidelines

DECISION NOTICE
and
FINDING OF NO SIGNIFICANT IMPACT
for
CALIFORNIA SPOTTED OWL SIERRAN PROVINCE
INTERIM GUIDELINES

Pacific Southwest Region
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I. Introduction

An environmental assessment (EA) has been prepared to describe alternative management strategies for the Sierran population of the California spotted owl (owl) and disclose the potential environmental effects of their implementation. The assessment area encompassed the following National Forests: Eldorado, Inyo, Lassen, Modoc, Plumas, Sequoia, Sierra, Stanislaus and the Tahoe, as well as the Lake Tahoe Basin Management Unit. The California Spotted Owl Interim Guidelines EA is available for review at the Pacific Southwest Regional Office, at all of the Forest Supervisor's Offices within the Region and in the Washington Office.

II. Proposed Action

The proposed action is to amend the Regional Guide and ten Forest Plans to provide for management of the owl for an interim period. The interim amended Standards and Guidelines will be in effect until a longer-term strategy to maintain viability of the owl is analyzed and adopted. Specifically, this longer-term strategy will consider recommendations of the Policy Implementation and Planning Team (refer to Section III, Coordination with the State of California). The Interim Guidelines are intended to bridge the time gap between the current obsolete strategy and the longer-term strategy. It is expected that the process to develop the longer-term strategy will take approximately two years.

III. Purpose and Need for Action and Project Objectives

The Forest Service has a need to manage habitat for the owl on National Forests in accordance with the requirements of the National Forest Management Act (NFMA) and its implementing regulations. The regulations (36 CFR 219.19) require that wildlife habitat be managed to maintain viable populations of existing native and desired non-native vertebrate species well-distributed throughout the planning area.

Recent studies have demonstrated that current direction, i.e. maintenance of a Spotted Owl Habitat Area (SOHA) network, does not assure that viability of the owl will be maintained. Both the Conservation Strategy for the Northern Spotted Owl (May 1990) (commonly known as the ISC Report) and the California Spotted Owl Report (July 1992) (CASPO Report), prepared by the California Spotted Owl Technical Assessment Team (Technical Team), concluded that the SOHA strategy for managing spotted owls would likely lead to extinction of the species.

The CASPO Report made two additional observations: (1) timber harvest practices have led to a serious decline in the number of large, old trees which are preferred by the owl; and (2) the threat of stand-destroying fires must be considered in any strategy. The purpose of the proposed action is to respond to these studies in developing a management strategy for the owl that will maintain population viability.

In order to be effective, any short-term strategy must provide for maintenance of management options for the owl. Therefore, it must include the essential elements for maintenance of viability, as identified in the CASPO Report. While

owl viability is the primary objective, the CASPO Report states a desired objective is to maintain spotted owls throughout Sierran conifer forests in a manner compatible with some level of timber production.

The specific project objectives were:

Protect known owl nest stands (or main roost stands if nest stands are not known) from any significant modification.

Protect very large, old trees in those Sierran timber strata which provide suitable owl habitat.

Reduce the threat of stand-destroying fires.

The CASPO Report directed its recommendations toward timber management activities on public lands because they can have the most extensive effects on owl habitat. Therefore, this proposed action only addresses timber, fuels and owl management Standards and Guidelines. There are currently adequate procedures to analyze, mitigate and address effects of non-timber projects on the owl.

Coordination with the State of California

In 1991, the State of California and the Forest Service formed two investigatory, advisory teams. The first team formed was the Technical Team. Its charter was to produce a report on the California spotted owl (the CASPO Report) which would: analyze and interpret relevant information on owl biology; characterize habitat attributes; evaluate current land management practices; evaluate a range of options to achieve an amount and configuration of suitable habitat to provide for the long-term maintenance of the owl throughout its range; and identify research, inventory and monitoring needs.

The second investigatory, advisory team formed was the Policy Implementation Planning (PIP) Team. Concurrently with this analysis, the PIP Team has been examining and evaluating alternative institutional approaches for implementation of the recommendations of the Technical Team. The charter for their analysis is to minimize economic, environmental and social costs. The Forest Service analysis of the longer-term strategy will use recommendations of the PIP Team. Issuance of these recommendations is currently scheduled for spring, 1993. Refer to Section X - Related Future Actions.

IV. Decision and Rationale for Selection

It is my decision to select Alternative 2 (CASPO recommendations) for implementation of the interim guidelines for management of the Sierran province of the California spotted owl. This Decision Notice amends the Regional Guide and the ten affected Forest Plans, documents my selection of this alternative and discloses the reasons for my decision.

Both Alternatives 2 and 3 respond to the purpose and need for action to maintain species viability, while Alternative 1 (No Action) does not provide reasonable assurance that viability of the owl will be maintained. Alternatives 2 and 3 respond to the project objectives of protecting known owl nest stands and very large, old trees, while Alternative 1 does not protect these stand elements nearly as well.

Alternative 1 continues the century-long trend of replacement of the original forest of large, widely-spaced trees with a young, dense even-aged forest. In addition, historical fire exclusion and selective harvest of fire-tolerant species have increased the percentage of fire-intolerant species in mixed conifer stands. The physical characteristics of white fir, in particular low crowns and high crown density, make stands containing white fir more susceptible to torching or crowning.

The conifer species found in the mid-elevations of the Sierra Nevada decrease in fire tolerance as they decrease in size, and smaller trees are usually younger trees. Therefore, the continued reduction in average stand age, which

is a typical result of Alternative 1, and the relatively high existing percentage of fir, will reduce the overall tolerance of the forest to fire and will make the overall forest highly susceptible to crown fire. The continuation of this trend through the direction from current Forest Plans will almost certainly lead to more and more large, stand-destroying fires. Large, high intensity fires render habitat unsuitable for owls for periods of up to a century.

Alternative 2 recommends practices which will increase the average age of forest stands and will also increase the overall tolerance of the stands to fire. It recommends silvicultural guidelines which will reduce fuel ladders on treated acres. Stands treated under these guidelines will be more tolerant of surface fire intensities and will have fewer of the physical characteristics that promote the propagation of torching and crown fires. The recommendations for wide-spread underburning address the problem of reducing surface fire intensity.

However, the requirements for Alternative 2 and 3 for log and snag retention make large scale underburning programs difficult, expensive and impractical. In addition, these requirements will increase the difficulty and cost of fire suppression. The conflict between the intent of the recommendation to reduce the incidence of fires which render owl habitat unsuitable and the requirements for retention of logs and snags will have to be resolved in the development of a longer-term strategy for the owl. Resolution of this conflict is beyond the scope of this analysis because data to support an alternate strategy is not available. Implementation of Alternative 2 will require monitoring and additional studies which identify the range of logs and snags which a self-sustaining owl population requires. Further quantification of the actual risk to owl habitat from stand-destroying fire is also needed as part of a longer-term proposal.

Both Alternatives 2 and 3 tend to retain more large trees and increase the average age of stands by removing small trees. These alternatives increase the tolerance of stands to surface fire and remove many trees that could carry fire from the ground into larger trees. Due to more acres projected for treatment in Alternative 2, this alternative has this beneficial effect to a greater degree. However, none of the three alternatives, due to the relatively small acreages projected for treatment, would significantly alter the fire regime in the short term.

In conclusion, Alternative 2 best meets the combination of project objectives. While both Alternatives 2 and 3 meet the objectives of maintaining important elements of owl habitat, Alternative 2 better meets the objective of reducing the threat of stand-destroying fires than Alternative 3.

V. Brief Description of the Selected Alternative

This alternative proposes implementation of the recommendations of the Technical Team. The primary features of Alternative 2 are:

For the Eldorado, Lassen, Plumas, Sequoia, Sierra, Stanislaus and Tahoe National Forests:

Maintain the base habitat contained within the SOHAs in accordance with Forest Land Management Plans. If a SOHA, or portion thereof, is rendered unsuitable by a catastrophic event such as a wildfire, remaining suitable owl habitat within the SOHA shall be maintained. However, there is no requirement that these SOHAs either be replaced or that additional habitat be added to the SOHAs.

Establish a 300-acre Protected Activity Center (PAC) around all currently known spotted owl sites in the owl range. Within these PACs, no stand altering activities will generally be allowed to occur except for some light fuels management activities. The CASPO Report stated that spotted owls are still widely and fairly evenly distributed throughout conifer forests of the western Sierra Nevada. Therefore, establishment of PACs on known owl sites is sufficient to maintain options for a longer-term strategy.

Within strata preferentially selected for nesting by owls (Selected strata) which are outside of PACs, one commercial entry is allowed during the interim period, no removal of live trees 30 inches in diameter breast height (dbh) or larger is allowed and retention of 40 percent of the basal area and canopy closure is maintained in the largest trees available.

Within strata utilized, but not preferred for nesting by owls (Other strata), one commercial entry is allowed during the interim period, no removal of live trees 30 inches dbh or larger is allowed, and retention of 30 percent of the basal area (at least 50 square feet of basal area per acre) is retained in the largest trees available.

In both Selected and Other strata, the largest 4-8 snags (dead and/or trees expected to die within six months) per acre are maintained (may be averaged over the harvest unit). The number of snags to be left is dependent on the diameter of snags available for retention. In addition, fuel treatments to remove surface and ladder fuels and protect owl habitat are encouraged and an average of at least 10-15 dry tons per acre of large dead and down material is retained.

Adaptive management is allowed in two situations: (1) When a project-specific biological evaluation demonstrates that the objectives of the CASPO recommendations may be better achieved through an alternate prescription, and (2) when projects are designed as administrative studies and coordinated with the Pacific Southwest Forest and Range Experiment Station (PSW), or with an oversight team established for this purpose. On each National Forest, administrative studies are limited to no more than two percent of the lands identified as "suitable for timber production" in the Forest Land Management Plans.

On lands where these requirements are implemented, project-driven owl surveys will not be required.

For the Inyo and Modoc National Forests and for the Lake Tahoe Basin Management Unit (LTBMU):

The Modoc and Inyo National Forests, and the LTBMU contribute less than one percent of the known owl sites on National Forest land in the Sierran province. Owls surveys are required only within suitable owl habitat. If owls are detected, their habitat will be managed in accordance with the Modified Cumulative Effects Analysis (CEA) process described in Alternative 3.

For the Lassen, Plumas, Tahoe, Inyo and Modoc National Forests and for the LTBMU:

Pure eastside pine habitat is not considered to be suitable and is not analyzed in detail in the EA. However, there is a small subset of suitable habitat within the eastside pine type (primarily fairly well-stocked pine stands with a white fir understory). When a project is proposed within this suitable area, the area will be surveyed for owls. Where owls are detected, the area will be managed using the Modified CEA process.

The Technical Team has concurred with habitat management on the Modoc, Inyo and LTBMU, and with eastside pine management.

VI. Alternatives and Scope of the Analysis

The alternatives were developed by the Interdisciplinary (ID) Team using the process directed by the National Environmental Policy Act (NEPA). This process provided a range of choices for managing resources within the project area. There were three alternatives considered in detail for this analysis. They are: Alternative 1-No Action (retain current Regional Guide and Forest Plan direction); Alternative 2-CASPO Report recommendations; and Alternative 3-Modified CEA process.

Alternative 1 would have continued management of the owl in accordance with current Forest Plan Standards and Guidelines. As is discussed in the following section (Alternatives Not Considered in Detail), the CEA process currently in use was designed to enable the Forest Service to preserve management options for the owl until the Technical Team completed its analysis and the appropriate legal procedures could be followed for implementation of a new strategy. Utilization of the CEA process did not change Regional Guide or Forest Plan Standards and Guidelines for the owl. The No Action Alternative would continue implementation of the SOHA network system and the Forest Plans. The Modoc and Inyo National Forests, and the LTBMU do not have SOHAs because these Forests have little owl habitat. They have been managing the owl through protection of identified owl sites.

Alternative 3 proposed continuation of the CEA process currently in use, but with modifications from the CASPO Report to respond better to the project objectives. The Modified CEA process is driven by identification of owl use areas, which is based on presence of suitable habitat and location of owls. If the available habitat is less than the acreage thought to be necessary for owl use, no harvest of green timber is generally allowed within this habitat.

Modifications to the CEA process include the creation of PACs, with the same management guidelines as Alternative 2. Within Selected and Other strata, the same management guidelines are provided as for Other strata in Alternative 2. Management guidelines for snag and dead and down retention are also the same as Alternative 2. Management of the SOHAs will also be the same as for Alternative 2. Alternative 3, in essence, identifies owl use areas and generally allows no green timber harvest in suitable habitat within these areas, except where available habitat exceeds owl needs. Outside of the protected suitable habitat, CASPO guidelines are applied. Project-driven owl surveys are also not required for Alternative 3.

VII. Alternatives Not Considered in Detail

There were many alternatives considered which were not developed in detail. Two alternatives suggested by the public were also evaluated by the Technical Team which developed the CASPO Report. They are: (1) Habitat Conservation Areas and (2) establishment of 4,500 acre protected activity centers around owl locations. These strategies were dismissed from detailed consideration because they would not adequately provide for protection from stand-destroying fires, which was an objective of the analysis.

Continuation of the current CEA process (without modification) was considered. If the CEA process were continued, Fiscal Year 1993 volumes are projected to be about 25 percent higher than the Modified CEA Alternative, however, the land base for this alternative is limited, and it is expected these volumes would drop off in Fiscal Year 1994 and approach Alternative 3 volumes. This alternative was dismissed from detailed consideration because it did not assure protection of known owl nest stands or the retention of the very large, old trees. Changes made to the fully developed Modified CEA Alternative (Alternative 3) are discussed in Appendix B.

Several variations of the CASPO recommendations, primarily zoning and/or moratorium of timber harvest within parts or all of the owl habitat, were considered. All the alternatives which would have excluded timber harvest on a substantial portion of the owl range were eliminated due to these alternatives' inability to reduce the risk of stand-destroying fires. The variations which suggested applying CASPO in some areas and Forest Plan recommendations in others would not adequately protect known owl nest stands or retain very large, old trees.

One of the more frequently suggested variations were several types of old-growth preservation/riparian network/ CASPO alternatives. These types of alternatives may be appropriate for consideration in the development of a longer-term management strategy for the owl and other mature-forest dependent wildlife species. However, these alternatives were dismissed from detailed analysis for these Interim Guidelines because they did not address the objective of reducing the threat of stand-destroying fires.

Adjustment of the diameter limit or basal area recommendations of CASPO to allow harvest of some larger trees and more flexibility in silvicultural treatments was considered. This alternative was dismissed from detailed consideration because there was no current research which would support these alterations. Alternative 2 provides for silvicultural flexibility in the Adaptive Management guidelines.

Alternatives were considered which eliminated clearcutting, or utilized uneven-aged management and group selection exclusively. These alternatives did not ensure protection of known owl nest stands, very large, old trees or reduce the threat of stand-destroying fires. However, the alternatives considered in detail do markedly reduce acres of clearcutting in much of the affected National Forests, and will result in some uneven-aged and group selection conditions. In particular, the group selection alternative may be modified to respond better to the project objectives, and may be considered in detail in the longer-term strategy analysis.

Several variations of adaptive management were considered, including mimicking natural fire patterns, experimentation with group selection, allowance of harvest within SOHAs and a proposal by the California Forestry Association to manage habitat by watersheds to mimic habitat that owls were using. These alternatives appeared to have merit, but there was not enough information currently available to ensure that they would meet the purpose and need for action. The adaptive management portion of the selected alternative does allow experimentation and it may be used to test these and other management practices.

The CASPO Alternative approach to management of Selected strata (proposed in CASPO Report-Chapter 13) was considered. This alternative was dismissed from further consideration because it was more complex to administer than the CASPO Alternative, and the effects of this proposal relative to owl viability were essentially the same. Thus, this alternative did not contribute to the range of alternatives presented.

Several salvage options were also considered. Due to the continuing effects of the drought it was thought that snag recruitment (i.e. natural tree mortality during the next few years) could "count" for some of the snag requirements in the CASPO and Modified CEA Alternatives. This concept may have merit, but it cannot be analyzed at the Regional level. Forests may be able to develop site-specific longer-term tree mortality predictions for some situations.

The option of establishing snag retention levels based upon current fire danger was considered. There is a strong public perception that high levels of snag retention contribute to current danger of wildfire and that snag retention should be limited on that basis. In fact, standing snags are more of a concern for long-term fire danger. The number of snags required under Alternative 2 will, in some areas, result in fuel loadings which exceed the 10-15 tons per acre guideline. In addition, it is unlikely that these fuel and snag levels were maintained at these levels in a natural forest with a frequent fire regime. However, there is no data to link lower fuel levels with survival of self-sustaining owl levels. Until such studies can be conducted, it is uncertain whether this option could meet owl viability concerns. Monitoring requirements incorporated into Alternative 2 will help provide needed data.

The option of establishing guidelines for salvage associated with large, severe wildfires in addition to guidelines for smaller wildfires and insect mortality was also considered. The specific option considered was to buffer suitable remaining owl habitat in severe wildfire areas with CASPO recommended snag levels and to retain Forest Plan-directed levels of snags in the interior of the wildfire area. This option was dismissed from detailed consideration because it did not supply adequate large dead and down material for future owl habitat, however, some elements of this option were included in Alternative 2.

VIII. Issues and Their Resolution

The following major issues were identified:

1. To what extent will management options for the California spotted owl be maintained in the short term?

The amount of owl habitat which would be made unsuitable through timber harvest varies by alternative. Based upon harvest calculations, there would be no reduction in the amount of Selected strata for Alternatives 2 and 3. There would be a reduction of approximately 4,800 acres of Selected strata for Alternative 1.

Alternative 1 will maintain adequate habitat for nest stands for 260 known owl pairs within the SOHA network. Approximately three-fourths of the known owl nest or roost stands are outside of SOHAs and timber harvest may eliminate habitat within these nest stands. Alternatives 2 and 3 maintain adequate habitat for nest stands for all of the 1,028 owl sites identified in the CASPO Report. Alternatives 2 and 3 both provide a high likelihood of maintaining the current known distribution of owls. Alternative 1 does not.

The alternatives vary in their effects upon the quality of owl habitat, particularly the retention of large, old trees and associated snags and down logs. These elements have been identified as particularly important to the ecological function of the stand as owl habitat. Alternative 1 will not retain these important habitat elements within the majority of acres harvested, as even-aged regeneration prescriptions are primarily used. Even where some trees are retained,

they are generally retained in insufficient numbers to ensure the continued existence and replacement of large trees. Alternatives 2 and 3 will retain large trees, large snags and logs. Outside of 300-acre PACs however, Alternative 2 allows for a reduction in canopy cover within Selected strata, potentially reducing the suitability of this habitat for nesting and roosting purposes but maintaining its suitability for foraging. In Other strata, Alternative 2 allows for a reduction in canopy cover, potentially reducing the suitability of this habitat so that it is no longer suitable as foraging habitat. Alternative 3 maintains the canopy cover and suitability of most of the owl habitat currently in use.

Alternative 1 will continue to fragment existing owl habitat through clearcut harvest methods, increasing the risk associated with juvenile dispersal and mate-finding and decreasing the quality of remaining patches of habitat. Alternatives 2 and 3, because they retain at least 50 square feet of basal area in the largest trees on all harvested acres, will reduce fragmentation effects by reducing the contrast between older forest patches and the surrounding landscape.

Alternatives 2 and 3 use harvest guidelines that will reduce the length of time required for owl habitat to redevelop. These alternatives focus on retaining the habitat elements that take the longest to replace: large, decadent trees, snags and downed logs. Habitat harvested under Alternative 1 will take much longer to redevelop these important habitat attributes. In the case of even-aged prescriptions it may be in excess of 150 years. For this reason, Alternatives 2 and 3 are much more likely to retain future management options than is Alternative 1.

Five percent of the forested areas in the Region burn in wildfires each decade. Most of these acres burn in large, intense fires which result in mortality of a majority of the overstory trees. These fires render owl habitat unsuitable for at least 60 to 70 years. Because Alternatives 2 and 3 maintain the current distribution of owl sites, the loss of any particular block of habitat from wildfire would present much less risk to population viability than would Alternative 1.

None of the three alternatives will affect this overall fire regime in the short term because the percent of the total area affected by the alternatives is too small. The impacts, however, may be noticeable on individual fires. Alternative 1 may result in smaller fires where the number of snags is reduced on harvested acres. Suppression efficiency will be reduced by both Alternative 2 and 3 where large numbers of snags are retained. On the other hand, areas harvested under Alternative 2, and to a lesser extent, Alternative 3, may burn at a lower intensity, thus retaining the large trees and redeveloping more quickly as owl habitat following wildfire. Because Alternative 2 allows harvest within much of the suitable owl habitat, this habitat would be protected from wildfire loss to a greater extent than for Alternative 3.

2. What are the effects to timber supply and what are economic effects?

There are many uncertainties inherent in volume projections, and these uncertainties are discussed in detail in the EA. Effects to jobs, local income and county receipts vary with timber harvest volume. Projected commercial **total** green and salvage volumes for the next **two years** are as follows: Alternative 1--1,284.6 million board feet (MMBF); Alternative 2--932 MMBF (73 percent of Alternative 1) and Alternative 3--778.2 MMBF (61 percent of Alternative 1). For Alternatives 1 and 2, slightly more than half of the volume is projected for FY 93. For Alternative 3, about 60 percent is projected for FY 93. However, these figures must be viewed in context. As stated, Alternative 1 would not assure maintenance of the current known distribution of owls, and would violate NFMA viability requirements.

These figures do not include biomass and non-commercial multiproduct volumes which would also add to total volume generated. All figures, including biomass and multiproduct volumes, are discussed in detail in the EA.

The alternatives' effects on timber products are also analyzed. Under Alternative 1, a full range of manufactured wood products would continue to be provided from the Sierran forests, in particular the high-value moldings, veneer and select lumber. Timber harvest would be maintained across the full spectrum of diameters, continuing to provide large dimension structural and heavy framing lumber. Price fluctuations would continue historic trends influenced by economic cycles and new housing starts.

Under Alternative 2, log grade, log value and sawing efficiency would decline. Products would be manufactured primarily from 6 inch to 20 inch diameter logs, resulting in lower valued products such as utility and economy lumber,

2 X 4 studs from firs and pallet material. A higher percentage of the logs would end up as chips or energy plant fuel and the availability of high value products such as veneer, molding, select, structural and heavy framing lumber which is dependent upon larger diameter, high grade trees would be reduced. Alternative 3 would have similar kinds of effects as Alternative 2, but to a greater magnitude.

Timber sale cost efficiency was also analyzed. The following cost factors vary proportionally to numbers of acres in the sale or analysis area: marking and cruising and environmental analysis costs. It is more cost efficient to produce a given amount of volume from a smaller number of acres, than from a greater number of acres. It costs more for a biologist, archaeologist, silviculturist or timber cruiser to examine, or for a forester to design, a timber sale which involves more acres to achieve a given volume of timber. Road construction, reconstruction and logging costs are greater when more acres must be accessed.

The only important difference between alternatives that is not clearly accounted for by volume per acre differences is the differences in owl and stand survey requirements. Alternatives 2 and 3 would greatly reduce the need to survey for owls compared to Alternative 1. This could reduce costs by six to eight dollars (based on costs experienced over the last two years) per thousand board feet (MBF). However, this dollar savings is not nearly as important as benefits derived from reducing agency timing and scheduling problems and personnel staffing concerns associated with owl surveys.

Alternatives 2 and 3, however, will necessitate more intensive and expensive vegetative surveys. Due to lack of experience with CASPO implementation, it is difficult to provide data about cost increases. However, field tests on two Forests have estimated that timber sale preparation (stand exam, data entry and processing, field reconnaissance and marking) costs could almost double.

Alternative 1 produces 4.4 MBF/acre, and both Alternatives 2 and 3 produce 2.7 MBF/acre. These values are low because salvage volumes per acre are included. Green volumes per acre are as follows: Alternative 1 produces 15.0 MBF/acre, Alternative 2 produces 9.6 MBF/acre and Alternative 3 produces 9.1 MBF/acre.

To obtain the same volume, 60 percent more acres would need to be harvested and unit costs would increase accordingly for Alternatives 2 and 3 when compared to Alternative 1. In general Alternative 1, which allows a full range of harvest prescriptions, is more efficient than Alternatives 2 and 3 which primarily allows a form of thinning from below that requires more acres to be entered for the same volume. Alternatives 2 and 3 would also have higher per acre sale preparation costs, however as stated, the reduced owl survey requirements would reduce these effects.

Alternatives 2 and 3, which result in less volume harvested, will result in loss of some jobs and have associated decreases in timber-generated income and receipts to counties, and may also result in social problems, particularly within timber-dependent communities. Stress resulting from job losses can have negative consequences for the individual and community. The short time frame the Interim Guidelines should be in effect should serve to mitigate some of these effects, but uncertainty about the longer-term strategy makes the degree of mitigation also unknown.

There are also anticipated changes in imports. A reduction in timber harvests in the State reduces competition among suppliers, raises market prices, and leads to increased use of imported products and may result in an increase in the price of the typical new house.

3. How will the risk be reduced of fires which would make California spotted owl habitat unsuitable?

Over the last century, the fire regime in Sierran forests has changed from a frequent, low intensity surface fire to infrequent, high intensity fire. The present fire regime affects forested areas at a rate of approximately 5 percent per decade. These acres burn in high intensity fires which cause widespread overstory mortality and make owl habitat unsuitable for at least 60 to 70 years.

None of the three alternatives fully succeeds in reducing the risk of making California spotted owl habitat unsuitable through wildfire. All three alternatives establish minimum levels of dead and down fuel loadings. None of the alternatives establish upper limits to fuel loadings which would reduce surface fire intensity, and hence the risk to

California spotted owl habitat. Alternative 1 (No Action) establishes the lowest minimum levels of dead and down fuel loading. It also establishes the lowest minimum number of snags per acre, which reduces the potential to add fuel to long-term fuel loadings. However, these snag and dead and down levels should be considered in terms of projects. Generally, there are few funds available to treat fuels outside of timber sale projects. The levels of dead and down fuels and snags in Forest Plan Standards and Guidelines should be considered in terms of acres harvested. In other words, the lower snag and dead and down levels are typically only attained on harvest acres, not throughout the landscape.

In practice, fuel loadings after harvests can be much higher than the minimums because no standards or guidelines have been established to keep fuels below some maximum level linked to wildfire risk or fire behavior. Alternatives 2 and 3 both establish a minimum dead and down fuel loading higher than Alternative 1, but concentrate the loading in large logs. Alternative 2 encourages removal of smaller dead and down woody material. It is not clear at this time if it will be practical or economical to remove the small material while retaining the large material. There is a large potential for additional fuels to be added under both Alternatives 2 and 3 as snags fall and are added to the fuel load.

Snags are the number two cause of fatalities and serious injury to firefighters in Region 5. Alternative 1 requires a minimum of 1.5 snags per acre. Firefighters can work in areas with this many snags if they exercise caution and avoid risk areas around snags. Both Alternatives 2 and 3 recommend snag retention levels that may pose an unacceptable risk to firefighters.

It is impossible to predict exactly how many snags will be actually retained due to differences in existing snag levels. In fact, (Alternatives 2 and 3) a range of 0-8 snags may be actually retained (zero snags may be retained if there are none to begin with). However, where there are high snag levels to start with, where over three or four are retained (depending on height of snags), there may be virtually no "safe" areas for firefighters. Wildfires will burn more acres if there are high (greater than 3-4) levels of snags imposed over large areas because control lines will be moved to safe areas. In addition, night time firefighting efforts will be curtailed for safety reasons. Large numbers of snags and logs also reduce firefighting efficiency and hence, increase fire size. However, as stated, the relatively small acreages affected during this interim period reduces these effects. This will be a greater consideration for the longer-term strategy.

Other Issues

There were other issues identified involving the wildlife, vegetative, watershed, soils, fisheries, cultural and recreation resources. Refer to the EA for specific issues, and their resolution.

VIII. Public Involvement

In early June 1992, the Forest Service published a notice in the Federal Register soliciting comments on the Interim Guidelines analysis. Also during this period, a legal notice was published in the Sacremento Bee. A press release was also issued soliciting public comments. My staff and I have met with representatives from environmental groups, the timber industry, other agencies, and elected officials to discuss the analysis for this proposed action.

In the first week of June, the Regional office initiated a mailing of information to over 300 affected/interested key publics, including elected officials. The mailed packets contained a cover letter explaining the basic premises of the analysis (including a draft purpose and need statement, draft alternatives, and identified initial issues), a copy of the Federal Register Notice and a copy of Chapter 1 of the CASPO Report. Individual National Forests contacted several thousand of their local publics using the same mailing packet, and/or additional information.

From the initial public contact, over 400 letters, form letters and phone calls were received. Comments were accepted during the entire analysis period (June through December). The public comments were analyzed and to the extent possible, issues, concerns, and opportunities were addressed in the EA. Public comments were processed as follows: Comments that raised issues or suggested other alternatives were directly analyzed as such. Refer to the Issues and

Alternatives sections of the EA and to the Alternatives not Considered in Detail portion of this Notice. Public comment that expressed opinions, generally "for" jobs or "for" owls could not be incorporated into the analysis because there was no substantive information, however, these comments were noted. Also refer to the Public Involvement Appendix in the EA for more information.

IX. Implementation

The CASPO Report represents the best efforts of a highly qualified group of scientists to identify and address concerns associated with the status of the California spotted owl. The CASPO Report received third-party peer review, which exceeded standard procedures. Field, research and academic professionals also submitted significant technical questions regarding the biology and silviculture contained in the CASPO Report. These questions were submitted to the Technical Team, which responded in detail. As a result of this process, some changes were made in the recommendations, although the basic CASPO Report conclusions remained unchanged. The Forest Service will continue to analyze new information as it becomes available.

Some publics wanted the CASPO recommendations implemented immediately for all projects not currently under contract (and some wanted contracts modified). Others thought nothing should be changed until more scientific research and review was completed. A basic conflict exists between the desire of some for continuing research on the owl before any actions take place, and the desire of others to apply new standards to existing projects, even when these projects are not likely to cause a trend toward federal listing or loss of viability.

There is a need to make an orderly transition from one management scheme to another to assure the most efficient and appropriate use of government resources. It is not necessary to require that CASPO guidelines be applied to projects currently well along in the planning process, to projects with a signed decision or to projects under contract. In devising its recommended interim strategy, the Technical Team assumed that all timber sales that were under contract prior to issuance of its draft report were already harvested. Therefore, continuation of existing contracts will still allow maintenance of owl management options and will not compromise the intent of the CASPO Report recommendations.

The California spotted owl is not a federally-listed species and the CASPO Report could not conclude if the owl population is in decline within the Sierran province. The Report said the current CEA process would maintain options for owl management in many cases. The amount of lands analyzed and prepared for timber sales under the CEA process is insignificant compared to the total amount of land available for timber management. Completion of these few projects will not foreclose future options for owl management. Therefore, it is not necessary to rework projects which are currently being planned, or are under contract.

It is my decision that the selected alternative will apply to any timber sale project decision made on or after March 1, 1993. Implementation of this decision between now and March 1 is optional. This date was selected as it coincides with the start of the owl survey season, and allows projects where analysis is substantially completed to go forward. To ensure however, that Alternative 2 is implemented in a timely manner, any timber sales with decisions signed before March 1, 1993, must be sold within calendar year 1993. This will result in a mix of effects, particularly in Fiscal Year 1993.

X. Related Future Actions

There are two related future actions:

1. Amendment of the Regional Guide and ten Forest Plans for a longer period for management of the owl:

   This analysis will commence after my decision on this interim amendment and will use PIP Team recommendations as a basis for alternative generation. It is estimated that this analysis will be completed in about two years. Public involvement in this effort will start with the issuance of a Notice of Intent (NOI) to prepare an environmental impact statement. The amendment for the longer term will use information obtained from the report of the

California Spotted Owl Policy Implementation Planning Team. The amendment will also consider monitoring results from timber sale and fuel treatment projects that use the CASPO guidelines, and additional guidance from the California Spotted Owl Steering Committee. This longer-term amendment is expected to be in effect until additional California spotted owl research results become available.

2. Amendment of ten Forest Plans to integrate new Standards and Guidelines for the owl with other provisions of the Forest Plans:

   These amendments are expected to re-allocate land to prescriptions and management areas, modify standards and guidelines for other affected resources, and establish new allowable timber sale quantities in at least seven Forest Plans based on decisions made in action item 1. The Forest Plan amendment process will be initiated by affected Forests over the next two years.

FINDING OF NO SIGNIFICANT IMPACTS

I have determined that my decision to select Alternative 2, analyzed in the California Spotted Owl-Sierran Province Interim Guidelines Environmental Assessment, is not a major federal action which would significantly affect the quality of the human environment either beneficially or adversely; therefore, an Environmental Impact Statement (EIS) is not needed for this short-term analysis. This determination is based on the following factors:

The Interim Guideline's effects are limited in time and scope.

- The Interim Guidelines will be in effect until the analysis for and adoption of a longer-term strategy is completed. This process is estimated to take approximately two years. Refer to the discussion of Related Future Actions. An EIS will be prepared to analyze the longer-term strategy.

- Although implementation of the Interim Guidelines would likely cause a short-term reduction in harvest levels (reduction of an estimated twenty-seven percent from the No Action Alternative projected harvest levels) this is not significant because of the short time period the Interim Guidelines would be in place, and because of experienced normal fluctuations in timber outputs due to market influences.

- The Interim Guidelines affect only those acres proposed for vegetative management through timber sales during the interim period. This consists of harvest on only about 10 percent of the capable, available and suitable (CAS) land base on the affected National Forests. If only green timber harvest is considered, this figure drops to a projected acreage of between 1 and 2 percent of the CAS lands.

- On the acres affected, effects are reduced on other resources (such as watershed, soils and visual quality) or the short-term nature of the effects is within allowed fluctuations (reduction to timber supply) in the ten-year planning cycle. Opportunities to achieve the timber outputs in later years are still maintained.

- Where these effects are reduced on other resources, and may be termed beneficial effects, these beneficial effects are in themselves not significant due to the short time frame involved and because the degree of benefits obtained are limited in the amount of acres affected and in intensity of beneficial effects.

No known unusual circumstances exist:

- Implementation of Alternative 2 will not involve highly uncertain, unique or unknown environmental risks. A site-specific analysis will be conducted for all proposed timber management projects. Any proposed timber management activities which could adversely affect the owl will require a determination of "not likely to result in a trend toward federal listing" documented in a biological evaluation.

- No unique characteristics of the geographic area will be affected by any of the actions allowed under Alternative 2.

The Interim Guidelines will not produce any significant irretrievable, irreversible or cumulative effects:

- Further site-specific analysis with appropriate NEPA documentation is required at the project level for each proposed action within owl habitat.

- The potential cumulative effects were evaluated in the Environmental Assessment and it was determined that by limiting the time period of the Interim Guidelines' implementation, cumulative effects would not be significant. In addition, cumulative effects are also limited by the nature of the Guidelines themselves. As analyzed in the EA, they reduce effects to resources such as watershed and visual quality.

- Selection of Alternative 2 will not set precedent for future actions with significant effects or represent a decision in principle about a future consideration. The actions allowed under Alternative 2 were designed to be temporary. They will be implemented only until longer-term direction can be developed. Refer to the discussion of Related Future Actions. An EIS will be prepared to analyze the longer-term strategy and any potential significant effects.

- Alternative 2 is not related to other actions with individually insignificant but cumulatively significant impacts. This determination is made both because the Interim Guidelines are temporary, and because of the nature of the action to allow a lower level of environmental effects than the existing Standards and Guidelines.

- A Biological Evaluation (BE) has been written for threatened, endangered, and sensitive species potentially affected by activities. The BE concluded that selection of Alternative 2 will have no effect on threatened or endangered species and will not result in a trend toward federal listing for sensitive species as long as site specific BEs are developed for all projects implemented under these guidelines that determine appropriate project design standards or mitigating measures for these species.

- Biological diversity will not be significantly affected at either the stand, landscape or regional levels; the character of the forest matrix will not be significantly altered.

- Public health and safety will not be significantly affected by any of the activities that could occur under Alternative 2.

- No adverse effects are expected on prime farmlands, rangeland, forest land, flood plains, wetlands or ecologically critical areas.

- Selected actions do not threaten to violate federal, State, local law, or requirements imposed for the protection of the environment.

- No adverse effects to any historic places or loss of scientific, cultural or historic resources will occur because of implementation of Alternative 2.

- The selected alternative will not significantly affect consumers, civil rights, minority groups or women. Although consumers may be affected by an increase in timber product price caused by a change in average harvested tree size and a reduction of harvest levels, these increases should be within normal market fluctuations. Jobs and income losses will also affect minority groups and women, but not disproportionately to their participation in affected industries. Public comments received during this analysis supported this conclusion.

The Interim Guidelines are not likely to cause highly controversial effects:

- The effects from the actions allowed under Alternative 2 are not likely to be highly controversial. Controversy in this context refers to cases where a substantial dispute exits as to the size, nature or effect of the major federal action rather than to the existence of opposition to a use. The scientific validity of the CASPO Report recommendations is discussed in the associated Decision Notice for the Interim Guidelines and in the EA.

Adoption of the Interim Guidelines is a nonsignificant amendment ot the Regional Guide and the ten affected Forest Plans because:

- These Interim Guidelines are temporary. They will be implemented only until the process for analysis and adoption of a longer-term strategy is completed, in approximately two years. They are expected not to be in place for the remainder of this planning period, either for the Regional Guide or the affected Forest Plans. The short length of the interim period supports a finding of non-significance.

- The Interim Guidelines do not involve a demand for a new service or goods not discussed in or contemplated by the Forest Plans.

- Although the Interim Guidelines will apply to future decisions in the planning area, they will only apply to decisions made within the next two years, and will not substantially alter the desired future condition of the land from that contemplated in the Regional Guide and Forest Plans. In fact, the Interim Guidelines work to accomplish the desired future condition intended by the Regional Guide by protection of a species identified as "Sensitive" and as a "Management Indicator Species" by this Region.

- The Interim Guidelines do not change Forest Plan land allocations, prescriptions, or management areas.

- Because of their short duration, the Interim Guidelines will not significantly alter the long-term relationships between the levels of goods and services projected by Forest Plans.

- Although the changes in Standards and Guidelines directed by the Interim Guidelines are not minor in type, they are minor in effects. As stated, they will cause lessened effects to such resources as owl habitat, visual quality, and watersheds. The effects on timber supply are short-term.

ADMINISTRATIVE REVIEW OPPORTUNITIES

This decision is subject to appeal pursuant to 36 CFR 217. Any written notice of appeal of this decision must be fully consistent with 36 CFR 217.9, "Content of a Notice of Appeal," including the reasons for appeal and must be filed with the Reviewing Officer: F. Dale Robertson, Chief, Forest Service - Appeals at the U.S. Department of Agriculture, Auditor's Building, 201 14th Street, S.W. at Independence Avenue, Washington, DC 20250 within 45 days of the date legal notice of this decision appeared in the Sacramento Bee. Appellants must submit two copies of a Notice of Appeal.

For further information contact: Chris Jauhola, Pacific Southwest Region Fisheries and Wildlife Management Staff Director, USDA Forest Service, 630 Sansome Street, San Francisco, CA 94111.

Ronald E. Stewart

RONALD E. STEWART
Regional Forester

JAN 19 1993

DATE